



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

MF

[Handwritten signature]

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

08/777,246 12/31/96 OISHI

K 35.61868

005514 WM01/0228
FITZPATRICK CELLA HARPER & SCINTO
30 ROCKEFELLER PLAZA
NEW YORK NY 10112

EXAMINER

SONG, H ART UNIT	PAPER NUMBER
---------------------	--------------

[Handwritten signature]

2131
DATE MAILED:

02/28/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
08/777,246

Applicant(s)
OISHI

Examiner
Ho S. Song

Group Art Unit
2131



☒ Responsive to communication(s) filed on Nov 16, 2000

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) 1-20, 26, and 27 is/are pending in the application.

Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) 1-20, 26, and 27 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☒ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- SEE OFFICE ACTION ON THE FOLLOWING PAGES ---

Art Unit: 2131

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/5/01 has been entered.
2. Rejection of claims 1-13 and 26-27 under 112 second paragraph is withdrawn with amended claims as per examiner interview 30 August 2000.

Examiner's Amendment

- 3 The following are examiner's amendments, as authorized by William Brunet, attorney for the applicant, in a phone call by the examiner(Mr. James Seal) at 9:00 am, 21 February 2001. The amendment will not be entered in view of examiner's new grounds of rejection.

4. Amended claim 27 line 2, 'programmed to cooperate [which] cooperates' should read 'programmed to cooperate[which cooperates]'. *Applicant is requested to*

provide the appropriate correction in a subsequent response.

Claim Rejections - 35 USC § 103


Art Unit: 2131

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made

6. Claims 1-20,26-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Friedman in view of Merkle(US 5,157,726)..

7. In claims 1-2, Friedman teaches inputting first information which could be image file, Private key is stored in the storage and Digital signature is generated based upon the first information (figure 2, page 907). Friedman however, does not teach storing secret key information which fed from an external device and outputting first information containing digital signature and whereby the output information is provided with the digital signature of the person who uses the information input device.. Merkle discloses storing a secret key in an external device and outputs first information containing digital signature whereby output information is provided with the digital signature of the person who uses the information input device in (col.4, lines 40-46,59-62). It would have been obvious to one of ordinary skill in the art at the time the invention was made to store secret key information in external device as taught in Merkle for storing a private key information internally in the system of Friedman because by storing a secret key information in an external device, it reduces the storage amounts of the system and if whole system is stolen or tampered by unknown attackers, attackers will not have an access to the secret



Art Unit: 2131

key information because it is stored externally therefore security is greatly strengthened and digital signature ensures image integrity and authenticity.

Claim 10 is rejected based on claims 1-2.

In claims 3,11, Friedman teaches generating a digital signature carries out an operation and outputs digital signature in (figure 2 of page 907).

In claim 4 and 12, Friedman teaches public key cryptography operation in (page 905, third paragraph and figure 1 of page 906).

Claims 6-7 differs from above claims 1-2 in that in claim 6 information is compressed by compressing means. The examiner asserts that it is well known in the art to compress data or information to have faster data transfer rate as well as not reducing the memory capacity. Davies discloses external device stores secret key corresponding to a registered user in (col.5, lines 67). It would have been obvious to one of ordinary skill in the art at the time the invention was made to store secret key corresponding to a registered user in external device so that only it can filter out from authorized to nonauthorized users therefore security can be enhanced greatly.

In claim 8, Friedman discloses generating carries out an operation and outputs distinguishing information in (fig.2, page 907).

In claims 5,9,13,17, Friedman does not teach using a RSA cryptosystem to obtain a digital signature. The examiner asserts that using RSA cryptosystem to obtain a digital signature is well known art because it's reliable and secure.

Art Unit: 2131

As per claim 14, Friedman teaches original message(image file) is inputted from first terminal the examiner asserts that there must be a terminal in order to process image data and second terminal device for having a memory for storing secret information and Friedman discloses an operator for executing a command based on an algorithm for generating a digital signature by using the image data and the secret information in (figure 2 of page 907). The examiner asserts that one of ordinary skill in the art would be motivated to use this scheme because extra security for certification would be provided if two terminal would be used one for storing private key and other for inputting image data instead of having one terminal to perform whole operation.

As per claim 15, Friedman teaches public key cryptography operation in (page 5, third paragraph and figure 1 of page 906).

As per claim 16, Merkle discloses secret key in (fig.3). One of ordinary skill in the art would be motivated to use secret key because data processing rate is much faster than public key system.

As per claims 18-20, see claims rejection 6-7 above, for discussion of compression techniques in general, further, the examiner asserts that applicant uses well known forms of compression techniques for video data. One skilled in the art would have been motivated to use one of these well known techniques for the advantages they possess.

In claims 26-27 see claim rejection 1-2 above.

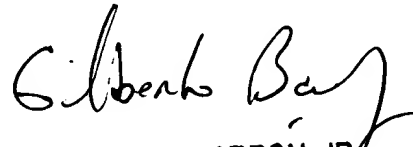
Art Unit: 2131

8. Any inquiry concerning this communication should be directed to Ho S. Song at telephone number (703)305-0042. The examiner can normally be reached on Monday through Friday from 7:30 a.m to 5:00 p.m.

GA
2/24/2
If attempts to reach the examiner by telephone are unsuccessful, the examiner's ^{acting} supervisor, Gilberto Barron, can be reached at (703) 305-1830.

Any inquiry of a general nature or relating to the status of this application or preceeding should be directed to the Group receptionist, whose telephone number is (703) 305-3900.

Ho Song


GILBERTO BARRON, JR.
PRIMARY EXAMINER
ART UNIT 2221122